EQUBNUS SE

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: April 1, 2005, 19:03:48; Search time 173 Seconds

(without alignments)

1066.386 Million cell updates/sec

Title:

US-10-790-224A-20

Perfect score:

2517

Sequence:

1 VAFETPEEIVKFIKDENVEF......EISPVRLRPTPQEFELYFDC 477

Scoring table:

BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched:

2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters:

2105692

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

A Geneseq 16Dec04:*

1: geneseqp1980s:*

2: geneseqp1990s:*

3: genesegp2000s:*

4: geneseqp2001s:*

5: geneseqp2002s:*

6: genesegp2003as:*

genesegp2003bs:* 7:

geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result No.	Score	% Query Match	Length		ID	Description
1 2	2517 2517	100.0			ADP87712 APP (EXP ADS73714 04 EP	Adp87712 Brevibact Ads73714 B. lactof Aab79682 Corynebac Aag93231 C glutami (2985 Jm24)
3	2516	100.0 100.0	477 477	8 4	AAB79682WO PD 1/2001 AAG93231 PD 1/2001 ABU25851	Ads/3/14 B. lactof Pilos Aab79682 Corynebac
5	2513 2036.5	99.8 80.9	477 478	4 6	AAG93231 (A) (I) (C) (A) ABU25851	Aab79682 Corynebac Aag93231 C glutami 6985 dm24 Abu25851 Protein e
6	.1790.5	71.1	478	2	AAW63035	Aaw63035 Mycobacte
7	1790.5	71.1	478	2	AAW37901	Aaw37901 Mycobacte
8	1789.5	71.1	478	7	ADF18438	Adf18438 Mycobacte
9	1784.5	70.9	478	2	AAW18160	Aaw18160 Mycobacte

10	1784.5	70.9	478	7	AAE39352	Aae39352	M. tuberc
11	1618	64.3	478	5	ABP65893		Bifidobac
12	1555.5	61.8	533	4	AAU54574		Propionib
13	1555.5	61.8	533	6	ABM51093		Propionib
14	1253.5	49.8	469	6	ABU49639		Protein e
15	1236.5	49.1	471	6	ABU19549		Protein e
16	1235.5	49.1	499	6	ABU23390		Protein e
17	1234.5	49.0	469	6	ABU33405		Protein e
18	1232.5	49.0	469	6	ABU28077		Protein e
19	1230.5	48.9	470	6	ABM70321		Photorhab
20	1227.5	48.8	469	6	ABU50092		Protein e
21	1226.5	48.7	471	6	ABU22059		Protein e
22	1223.5	48.6	469	6	ABU31549		Protein e
23	1221.5	48.5	476	7	ABO65700		Klebsiell
24	1216.5	48.3	469	4	AAU38196		Salmonell
25	1216.5	48.3	469	6	ABU48136		Protein e
26	1215.5	48.3	468	7	ADI53075		E. coli g
27	1215.5	48.3	469	4	AAU34825		E. coli c
28	1215.5		469	6	ABU28844	Abu28844	Protein e
29	1215.5	48.3	469	8	ADI38944	Adi38944	Glutamine
30	1214.5	48.3	469	6	ABU45561	Abu45561	Protein e
31	1201.5	47.7	469	6	ABU40915	Abu40915	Protein e
32	1201.5	47.7	493	7	ADF06469	Adf06469	Bacterial
33	1188	47.2	468	6	ABU40023	Abu40023	Protein e
34	1181	46.9	511	6	ABU37246	Abu37246	Protein e
35	1181	46.9	524	6	ABP80864	Abp80864	N. gonorr
36	1176	46.7	468	6	ABU41641		Protein e
37	1176	46.7	472	6	ABU38151	Abu38151	Protein e
38	1173	46.6	472	8	ADP08211	Adp08211	Neisseria
39	1165	46.3	469	4	AAU36495	Aau36495	Pseudomon
40	1165	46.3	469	6	ABÚ38863	Abu38863	Protein e
41	1163	46.2	471	6	ABU16678	Abu16678	Protein e
42	1163	46.2	489	6	ADA33076	Ada33076	Acinetoba
43	1159.5	46.1	472	4	AAU35544	Aau35544	Haemophil
44	1159.5	46.1	472	6	ABU30408		Protein e
45	1159.5	46.1	472	6	ABU39284	Abu39284	Protein e

.

OM protein - protein search, using sw model

Run on: April 1, 2005, 19:13:35; Search time 43 Seconds

(without alignments)

828.084 Million cell updates/sec

Title: US-10-790-224A-20

Perfect score: 2517

Sequence: 1 VAFETPEEIVKFIKDENVEF.....EISPVRLRPTPQEFELYFDC 477

Scoring table: BLOSUM62

Gapop 10.0, Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued_Patents_AA:*

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3: /cgn2 6/ptodata/1/iaa/6A COMB.pep:*

4: /cgn2 6/ptodata/1/iaa/6B COMB.pep:*

5: /cgn2 6/ptodata/1/iaa/PCTUS COMB.pep:*

6: /cgn2 6/ptodata/1/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		용				
Result		Query				
No.	Score	Match	Length	DB	ID ·	Description
1	1221.5	48.5	476	4	US-09-489-039A-12217	Sequence 12217, A
2	1201.5	47.7	493	4	US-09-543-681A-6754	Sequence 6754, Ap
3	1163	46.2	489	4	US-09-328-352-4363	Sequence 4363, Ap
4	1153.5	45.8	481	4	US-09-252-991A-32811	Sequence 32811, A
5	1122	44.6	476	4	US-09-540-236-2406	Sequence 2406, Ap
6	722.5	28.7	448	4	US-09-583-110-4662	Sequence 4662, Ap
7	722	28.7	446	4	US-09-710-279-2250	Sequence 2250, Ap
8	722	28.7	452	3	US-09-134-001C-4173	Sequence 4173, Ap
9	499	19.8	241	4	US-09-134-000C-4967	Sequence 4967, Ap
10	457	18.2	531	4	US-09-252-991A-26690	Sequence 26690, A
11	430	17.1	275	4	US-09-107-532A-6200	Sequence 6200, Ap

17 3 18 3 19 338 20 313 21 275 22 268 23 249 24 2 25 222 26 157 27 1 28 139	7.5 16.3 5.5 16.3 888 15.4 8348 13.8 8341 13.8 8.5 12.9 6.5 10.9 8.5 10.9 8.5 9.9 9.9 9.9 9.9 9.9 9.9 9.9 9.9	250 489 464 3 190 6 449 6 661 480 7 520 7 208 2 257 8 97	4 4 4 4 4 4 4 4 4	US-09-902-540-15979 US-09-252-991A-27559 US-09-107-433-4225 US-09-252-991A-27833 US-09-252-991A-28048 US-09-107-532A-4613 US-09-252-991A-17901 US-09-252-991A-19014 US-09-252-991A-18960 US-09-328-352-6949 US-09-949-016-7107 US-09-252-991A-16796 US-09-902-540-9748	Sequence 15979, A Sequence 27559, A Sequence 4225, Ap Sequence 27833, A Sequence 28048, A Sequence 4613, Ap Sequence 17901, A Sequence 19014, A Sequence 18960, A Sequence 6949, Ap Sequence 7107, Ap Sequence 16796, A Sequence 9748, Ap	
14 405 15 401 16 3 17 3 18 3 19 338 20 313 21 275 22 268 23 249 24 2 25 222 26 157 27 1 28 139	5.5 16.6 388 15.6 348 13.8 341 13.8 3.5 13.6 3.5 10.9 3.5 10.9 3.5 10.9 3.5 10.9 3.5 10.9 3.5 10.9 3.5 10.9 3.5 10.9 3.6 10.9 3.7 10.9 3.8 10	250 489 464 3 190 6 449 6 661 480 7 520 7 208 2 257 8 97	4 4 4 4 4 4 4 4	US-09-107-433-4225 US-09-252-991A-27833 US-09-252-991A-28048 US-09-107-532A-4613 US-09-252-991A-17901 US-09-252-991A-19014 US-09-252-991A-18960 US-09-328-352-6949 US-09-949-016-7107 US-09-252-991A-16796	Sequence 4225, Ap Sequence 27833, A Sequence 28048, A Sequence 4613, Ap Sequence 17901, A Sequence 19014, A Sequence 18960, A Sequence 6949, Ap Sequence 7107, Ap Sequence 16796, A	
15 401 16 3 17 3 18 3 19 338 20 313 21 275 22 268 23 249 24 2 25 222 26 157 27 1 28 139	1.5 16.0 388 15.4 348 13.8 341 13.9 3.5 12.9 5.5 10.9 3.5 10.7 3.5 10.7 3.5 42.9 2.5 8.8 7.5 6.3	489 464 491 649 649 7520 7520 7520 7520 7520 7520 7520 7520	4 4 4 4 4 4 4 4	US-09-252-991A-27833 US-09-252-991A-28048 US-09-107-532A-4613 US-09-252-991A-17901 US-09-252-991A-19014 US-09-252-991A-18960 US-09-328-352-6949 US-09-949-016-7107 US-09-252-991A-16796	Sequence 27833, A Sequence 28048, A Sequence 4613, Ap Sequence 17901, A Sequence 19014, A Sequence 18960, A Sequence 6949, Ap Sequence 7107, Ap Sequence 16796, A	
16 3 17 3 18 3 19 338 20 313 21 275 22 268 23 249 24 2 25 222 26 157 27 1 28 139	388 15.4 341 13.8 35.5 13.4 3.5 12.8 5.5 10.9 3.5 10.7 3.5 10.7 3.5 10.7 3.5 10.7 3.5 10.7 3.5 10.7 3.5 6.3 4.2 9.6 5.5 6.3 156 6.3	464 3 190 449 4 491 6 661 480 520 9 1037 208 257 97	4 4 4 4 4 4 4 4	US-09-252-991A-28048 US-09-107-532A-4613 US-09-252-991A-17901 US-09-252-991A-19014 US-09-252-991A-18960 US-09-328-352-6949 US-09-949-016-7107 US-09-252-991A-16796	Sequence 28048, A Sequence 4613, Ap Sequence 17901, A Sequence 19014, A Sequence 18960, A Sequence 6949, Ap Sequence 7107, Ap Sequence 16796, A	
17 3 18 3 19 338 20 313 21 275 22 268 23 249 24 2 25 222 26 157 27 1 28 139	348 13.8 341 13.8 3.5 13.6 3.5 12.8 5.5 10.9 3.5 10.7 3.5 10.7 3.5 9.9 242 9.6 2.5 8.8 7.5 6.3 156 6.3	190 449 491 6661 67520 91037 5208 257	4 4 4 4 4 4 4	US-09-107-532A-4613 US-09-252-991A-17901 US-09-252-991A-19014 US-09-252-991A-18960 US-09-328-352-6949 US-09-949-016-7107 US-09-252-991A-16796	Sequence 4613, Ap Sequence 17901, A Sequence 19014, A Sequence 18960, A Sequence 6949, Ap Sequence 7107, Ap Sequence 16796, A	
18 3 19 338 20 313 21 275 22 268 23 249 24 2 25 222 26 157 27 1 28 139	341 13.9 3.5 13.6 3.5 12.9 5.5 10.9 3.5 10.7 9.5 9.9 242 9.6 2.5 8.8 7.5 6.3	449 491 6661 7520 1037 6 208 257 97	4 4 4 4 4 4	US-09-252-991A-17901 US-09-252-991A-19014 US-09-252-991A-18960 US-09-328-352-6949 US-09-949-016-7107 US-09-252-991A-16796	Sequence 17901, A Sequence 19014, A Sequence 18960, A Sequence 6949, Ap Sequence 7107, Ap Sequence 16796, A	
19 338 20 313 21 275 22 268 23 249 24 2 25 222 26 157 27 1 28 139	3.5 13.4 3.5 12.5 5.5 10.5 3.5 10.7 9.5 9.5 242 9.6 2.5 8.8 7.5 6.3	491 6 661 9 480 7 520 9 1037 6 208 8 257 8 97	4 4 4 4 4 4	US-09-252-991A-19014 US-09-252-991A-18960 US-09-328-352-6949 US-09-949-016-7107 US-09-252-991A-16796	Sequence 19014, A Sequence 18960, A Sequence 6949, Ap Sequence 7107, Ap Sequence 16796, A	
20 313 21 275 22 268 23 249 24 2 25 222 26 157 27 1 28 139	3.5 12.5 5.5 10.5 3.5 10.7 9.5 9.9 242 9.0 2.5 8.8 7.5 6.3	6 661 9 480 7 520 9 1037 6 208 8 257 8 97	4 4 4 4 4	US-09-252-991A-18960 US-09-328-352-6949 US-09-949-016-7107 US-09-252-991A-16796	Sequence 18960, A Sequence 6949, Ap Sequence 7107, Ap Sequence 16796, A	
21 275 22 268 23 249 24 2 25 222 26 157 27 1 28 139	5.5 10.9 3.5 10.7 9.5 9.9 242 9.0 2.5 8.8 7.5 6.3	480 520 9 1037 5 208 8 257 8 97	4 4 4 4	US-09-328-352-6949 US-09-949-016-7107 US-09-252-991A-16796	Sequence 6949, Ap Sequence 7107, Ap Sequence 16796, A	
22 268 23 249 24 2 25 222 26 157 27 1 28 139	3.5 10.7 9.5 9.9 242 9.0 2.5 8.8 7.5 6.3	520 1037 5 208 3 257 3 97	4 4 4 4	US-09-949-016-7107 US-09-252-991A-16796	Sequence 7107, Ap Sequence 16796, A	
23 249 24 2 25 222 26 157 27 1 28 139	9.5 9.9 242 9.0 2.5 8.8 7.5 6.3	1037 5 208 3 257 3 97	4 4 4	US-09-252-991A-16796	Sequence 16796, A	
24 2 25 222 26 157 27 1 28 139	242 9.0 2.5 8.8 7.5 6.3 156 6.3	5 · 208 3 · 257 3 · 97	4 4		_	
25 222 26 157 27 1 28 139	2.5 8.8 7.5 6.3 156 6.3	3 257 3 97	4		Sequence 9748. Ab	
26 157 27 1 28 139	7.5 6.3 156 6.3	97		US-09-489-039A-7508	Sequence 7508, Ap	
27 1 28 139	156 6.2		4	US-09-107-433-4285	Sequence 4285, Ap	
		401		US-09-949-016-7956	Sequence 7956, Ap	
	9.5 5.9			US-09-786-534-2	Sequence 2, Appli	
	132 5.2			US-09-248-796A-17492	Sequence 17492, A	
30 1	129 5.			US-09-270-767-42090	Sequence 42090, A	
31 104	4.5 4.2	796	4	US-09-107-532A-7065	Sequence 7065, Ap	
32 1	104 4.3	. 139	4	US-09-107-433-4038	Sequence 4038, Ap	
33 101	1.5 4.0	599	4	US-09-543-681A-4524		
34 1	100 4.0	232	4	US-09-489-039A-7457	- ·	
35 99	9.5 4.0	760	3	US-09-323-872A-31	Sequence 31, Appl	
36 99	9.5 4.0	760	4	US-09-072-433-35	Sequence 35, Appl	
37			4	US-09-328-352-5486	Sequence 5486, Ap	
		765	4	US-09-489-039A-12098	Sequence 12098, A	
	98 3.5			US-08-434-702-6	Sequence 6, Appli	
				US-08-271-883-6	Sequence 6, Appli	
41				US-09-252-991A-22301	Sequence 22301, A	
				US-08-804-227C-10	Sequence 10, Appl	
					Sequence 4, Appli	
		854	4	US-09-949-016-11363	Sequence 11363, A	
	33 103 34 3 35 99 36 99 37 38 98 39 40 41 42 43 44 45	33 101.5 4.0 34 100 4.0 35 99.5 4.0 36 99.5 4.0 37 99 3.9 38 98.5 3.9 39 98 3.9 40 98 3.9 41 96 3.8 42 95 3.8 43 95 3.8 44 94 3.7	33 101.5 4.0 599 34 100 4.0 232 35 99.5 4.0 760 36 99.5 4.0 760 37 99 3.9 3290 38 98.5 3.9 765 39 98 3.9 452 40 98 3.9 452 41 96 3.8 1548 42 95 3.8 3724 43 95 3.8 3724 44 94 3.7 448 45 93 3.7 854	33 101.5 4.0 599 4 34 100 4.0 232 4 35 99.5 4.0 760 3 36 99.5 4.0 760 4 37 99 3.9 3290 4 38 98.5 3.9 765 4 39 98 3.9 452 1 40 98 3.9 452 1 41 96 3.8 1548 4 42 95 3.8 3724 2 43 95 3.8 3724 2 44 94 3.7 448 4 45 93 3.7 854 4	33 101.5 4.0 599 4 US-09-543-681A-4524 34 100 4.0 232 4 US-09-489-039A-7457 35 99.5 4.0 760 3 US-09-323-872A-31 36 99.5 4.0 760 4 US-09-072-433-35 37 99 3.9 3290 4 US-09-328-352-5486 38 98.5 3.9 765 4 US-09-489-039A-12098 39 98 3.9 452 1 US-08-434-702-6 40 98 3.9 452 1 US-08-271-883-6 41 96 3.8 1548 4 US-09-252-991A-22301 42 95 3.8 3724 2 US-08-804-227C-10 43 95 3.8 3724 2 US-08-804-198-4 44 94 3.7 448 4 US-09-878-766A-22 45 93 3.7 854 4 US-09-949-016-11363	33 101.5 4.0 599 4 US-09-543-681A-4524 Sequence 4524, Ap 34 100 4.0 232 4 US-09-489-039A-7457 Sequence 7457, Ap 35 99.5 4.0 760 3 US-09-323-872A-31 Sequence 31, Appl 36 99.5 4.0 760 4 US-09-072-433-35 Sequence 35, Appl 37 99 3.9 3290 4 US-09-328-352-5486 Sequence 5486, Ap 38 98.5 3.9 765 4 US-09-489-039A-12098 Sequence 12098, A 39 98 3.9 452 1 US-08-434-702-6 Sequence 6, Appli 40 98 3.9 452 1 US-08-271-883-6 Sequence 6, Appli 41 96 3.8 1548 4 US-09-252-991A-22301 Sequence 22301, A 42 95 3.8 3724 2 US-08-804-227C-10 Sequence 10, Appl 43 95 3.8 3724 2 US-08-804-198-4 Sequence 4, Appli 44 94 3.7 448 4 US-09-878-766A-22 Sequence 22, Appl 45 93 3.7 854 4 US-09-949-016-11363 Sequence 11363, A

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OM protein - protein search, using sw model

Run on: April 1, 2005, 19:19:50; Search time 143 Seconds

(without alignments)

1106.082 Million cell updates/sec

Title: US-10-790-224A-20

Perfect score: 2517

Sequence: 1 VAFETPEEIVKFIKDENVEF......EISPVRLRPTPQEFELYFDC 477

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1413372 segs, 331592847 residues

Total number of hits satisfying chosen parameters: 1413372

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:*

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6: /cgn2 6/ptodata/2/pubpaa/PCTUS PUBCOMB.pep:*

7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*

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20: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Result Query

No.	·Score	Match	Length	DB	Description					
1	2517	100.0	477	16	US-10-720-177-4	Sequence 4. Appli				
2	2517	100.0	477	17		Sequence 4, Appli Sequence 20, Appl Sequence 6985, Ap 09 Sequence 53775, A Sequence 13532, A Sequence 77563, A				
3	2513	99.8	477	9	~	Sequence 6985, Ap 09 10				
4	2036.5	80.9	478	15	US-10-282-122A-53775	Sequence 53775, A 1093				
5	1642.5	65.3	469	14	US-10-156-761-13532	Sequence 13532, A				
6	1253.5	49.8	469	15	US-10-282-122A-77563	Sequence 77563, A				
7	1236.5	49.1	471	15	US-10-282-122A-47473	Sequence 47473, A				
8	1235.5	49.1	499	15	US-10-282-122A-51314	Sequence 51314, A				
9	1234.5	49.0	469	15	US-10-282-122A-61329	Sequence 61329, A				
10	1232.5	49.0	469	15·	US-10-282-122A-56001	Sequence 56001, A				
11	1227.5	48.8	469	15	US-10-282-122A-78016	Sequence 78016, A				
12	1226.5	48.7	471	15		Sequence 49983, A				
13	1223.5	48.6	469	15	US-10-282-122A-59473	Sequence 59473, A				
14	1216.5	48.3	469	9	US-09-815-242-13789	Sequence 13789, A				
15	1216.5	48.3	469	15	US-10-282-122A-76060	Sequence 76060, A				
16	1215.5	48.3	468	14		Sequence 1, Appli				
17	1215.5	48.3	469	9		Sequence 10418, A				
18	1215.5	48.3	469	15		Sequence 56768, A				
19	1215.5	48.3		15		Sequence 89, Appl				
20	1214.5	48.3	469	15		Sequence 73485, A				
21	1201.5	47.7	469	15		Sequence 68839, A				
22	1188	47.2	468	15	US-10-282-122A-67947	Sequence 67947, A				
23 24	1181	46.9	511	15	US-10-282-122A-65170	Sequence 65170, A				
25	1176 1176	46.7 46.7	468 472	15 15	US-10-282-122A-69565	Sequence 69565, A				
26	1176	46.7	469		US-10-282-122A-66075	Sequence 66075, A				
27	1165	46.3	469	9 15	·	Sequence 12088, A				
28	1163	46.2	471	15		Sequence 66787, A				
29	1159.5	46.1	472	9	US-09-815-242-11137	Sequence 44602, A				
30	1159.5	46.1	472	15	US-10-282-122A-58332	Sequence 11137, A Sequence 58332, A				
31	1159.5	46.1	472	15	US-10-282-122A-67208	Sequence 67208, A				
32	1139.5	45.3	448		US-10-282-122A-49184	Sequence 49184, A				
33	1122	44.6	469	15		Sequence 63077, A				
34	1086.5	43.2	476		US-10-282-122A-54398	Sequence 54398, A				
35	1048	41.6	481		US-09-815-242-11507	Sequence 11507, A				
36	1048	41.6	481		US-10-282-122A-58725	Sequence 58725, A				
37	1048	41.6	481	15	US-10-335-977-6523	Sequence 6523, Ap				
38	811	32.2	446	15	US-10-282-122A-58019	Sequence 58019, A				
39	803.5	31.9	444	15	US-10-282-122A-45823	Sequence 45823, A				
40	787	31.3	446	15	US-10-282-122A-57203	Sequence 57203, A				
41	787	31.3	451	9	US-09-815-242-10514	Sequence 10514, A				
42	782.5	31.1	444	15	US-10-282-122A-45990	Sequence 45990, A				
43	765	30.4	439	15	US-10-369-493-2983	Sequence 2983, Ap				
44	762.5	30.3	448	15	US-10-282-122A-72256	Sequence 72256, A				
45	753	29.9	444	15	US-10-282-122A-60735	Sequence 60735, A				

ALIGNMENTS

```
RESULT 1
US-10-720-177-4
; Sequence 4, Application US/10720177
 Publication No. US20040152175A1
 GENERAL INFORMATION:
  APPLICANT: NAKAMURA, Jun
  APPLICANT:
           AKIYAMA, Kayo
  TITLE OF INVENTION: Method for Producing L-Glutamine and L-Glutamine
Producing Bacteria
  FILE REFERENCE: OP1637-US
  CURRENT APPLICATION NUMBER: US/10/720,177
  CURRENT FILING DATE: 2003-11-25
  PRIOR APPLICATION NUMBER: JP 2002-342287
  PRIOR FILING DATE: 2002-11-26
  NUMBER OF SEQ ID NOS: 20
  SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 4
   LENGTH: 477
   TYPE: PRT
   ORGANISM: Brevibacterium
                       flavum
US-10-720-177-4
 Query Match
                     100.0%;
                            Score 2517; DB 16;
                                             Length 477;
                           Pred. No. 1.5e-228;
 Best Local Similarity
                     100.0%;
 Matches 477; Conservative
                          0; Mismatches
                                         0;
                                            Indels
                                                     0;
                                                              0;
                                                        Gaps
          1 VAFETPEEIVKFIKDENVEFVDVRFTDLPGTEQHFSIPAASFDADTVEEGLAFDGSSIRG 60
Qy
           1 VAFETPEEIVKFIKDENVEFVDVRFTDLPGTEQHFSIPAASFDADTVEEGLAFDGSSIRG 60
Db
         61 FTTIDESDMNLLPDLGTATLDPFRKAKTLNVKFFVHDPFTREAFSRDPRNVARKAEOYLA 120
Qу
           61 FTTIDESDMNLLPDLGTATLDPFRKAKTLNVKFFVHDPFTREAFSRDPRNVARKAEQYLA 120
Db
Qy
        121 STGIADTCNFGAEAEFYLFDSVRYSTEMNSGFYEVDTEEGWWNRGKETNLDGTPNLGAKN 180
           Dh
        121 STGIADTCNFGAEAEFYLFDSVRYSTEMNSGFYEVDTEEGWWNRGKETNLDGTPNLGAKN 180
Qу
        181 RVKGGYFPVAPYDQTVDVRDDMVRNLAASGFALERFHHEVGGGQQEINYRFNTMLHAADD 240
           Db
        181 RVKGGYFPVAPYDQTVDVRDDMVRNLAASGFALERFHHEVGGGQQEINYRFNTMLHAADD 240
Qу
        241 IQTFKYIIKNTARLHGKAATFMPKPLAGDNGSGMHAHQSLWKDGKPLFHDESGYAGLSDI 300
           Db
        241 IQTFKYIIKNTARLHGKAATFMP.KPLAGDNGSGMHAHQSLWKDGKPLFHDESGYAGLSDI 300
        301 ARYYIGGILHHAGAVLAFTNATLNSYHRLVPGFEAPINLVYSQRNRSAAVRIPITGSNPK 360
Qу
           301 ARYYIGGILHHAGAVLAFTNATLNSYHRLVPGFEAPINLVYSQRNRSAAVRIPITGSNPK 360
Db
Qу
        361 AKRIEFRAPDPSGNPYLGFAAMMMAGLDGIKNRIEPHAPVDKDLYELPPEEAASIPQAPT 420
           Db
        361 AKRIEFRAPDPSGNPYLGFAAMMMAGLDGIKNRIEPHAPVDKDLYELPPEEAASIPOAPT 420
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OM protein - protein search, using sw model

Run on: April 1, 2005, 19:04:39 ; Search time 45 Seconds

(without alignments)

1019.898 Million cell updates/sec

Title: US-10-790-224A-20

Perfect score: 2517

Sequence: 1 VAFETPEEIVKFIKDENVEF.....EISPVRLRPTPQEFELYFDC 477

Scoring table: BLOSUM62

Gapop 10.0, Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : PIR_79:*

1: pir1:*

2: pir2:*

3: pir3:*

4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result		% Query				•
No.	Score	- 4	Length	DB	ID	Description
1 2	1789.5 1654.5	71.1 65.7	478 469	2 1·	H70775 AJSMQC	probable glutamine glutamate-ammonia
. 4 . 5	1592.5 1516 1412.5	63.3 60.2 56.1	469 474 473	2 2 2	S32024 A40598 S75141	glutamate-ammonia glutamate-ammonia glutamate-ammonia
6 7	1394 1380.5	55.4 54.8	471 473	2	JC1403 A47050	glutamate-ammonia glutamate-ammonia glutamate-ammonia
8	1363.5	54.2 54.2	474 474	1 2	AJAIQ AI2096	glutamate-ammonia glutamate-ammonia
10 11 12	1266 1253.5 1252	50.3 49.8 49.7	469 469 468	2 2 1	G70310 A82038 AJVCOA	glutamate-ammonia glutamate-ammonia
13	1227.5	48.8	469	2	AIOOO3	glutamate-ammonia glutamate-ammonia

14	1223.5	48.6	469	1	AJEBQT
15	1216.5	48.3	469	2	AI0949
16	1215.5	48.3	469	1	AJECQ
17	1215.5	48.3	469	2	Н91227
18	1211.5	48.1	469	2	G86074
19	1211	48.1	469	2	AC2794
20	1211	48.1	469	2	B97573
21	1204.5	47.9	469	2	S23899
22	1197.5	47.6	468	1	AJKCQB
23	1184	47.0	468	2	A37176
24	1182.5	47.0	467	1	AJAVQ
25	1176	46.7	472	2	E81784
26	1173	46.6	472	2	F81208
27	1171.5	46.5	504	2	G82631
28	1166	46.3	4.68	1	AJBCQF
29	1165	46.3	469	2	G83005
30	1162	46.2	469	2	AE3374
31	1159.5	46.1	472	2	164098
32	1159	46.0	469	2	D87493
33	1148	45.6	467	2	S33181
34	1132	45.0	469	1	AJZRQL
35	1086.5	43.2	476	2	F81340
36	1048	41.6	481	2	B71929
37	1048	41.6	481	2	н64583
38	957.5	38.0	471	2	A99180
39	956.5	38.0	471	2	S11899
40	806.5	32.0	444	1	AJBSQU
41	805.5	32.0	491	2	E69368
42	793	31.5	444	1	AJBSQS
43	780.5	31.0	454	2	A64468
44	765	30.4	439	2	B72313
45	763	30.3	446	2	Т46736

glutamate-ammonia glutamine syntheta glutamate-ammonia glutamine syntheta glutamine syntheta glutamine syntheta glutamine syntheta glutamate-ammonia glutamate-ammonia glutamate-ammonia glutamate-ammonia glutamate-ammonia glutamate-ammonia glutamine syntheta glutamate-ammonia glutamine syntheta glutamate-ammonia glutamate-ammonia glutamine syntheta glutamate-ammonia glutamate-ammonia glutamate-ammonia glutamine syntheta glutamine syntheta hypothetical prote glutamate-ammonia glutamate-ammonia glutamine syntheta glutamate-ammonia glutamate-ammonia glutamine syntheta glutamate-ammonia

OM protein - protein search, using sw model

Run on: April 1, 2005, 19:12:54; Search time 182 Seconds

(without alignments)

1342.098 Million cell updates/sec

Title: US-10-790-224A-20

Perfect score: 2517

Sequence: 1 VAFETPEEIVKFIKDENVEF......EISPVRLRPTPQEFELYFDC 477

Scoring table: BLOSUM62

Gapop 10.0, Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : UniProt_03:*

1: uniprot_sprot:*
2: uniprot trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		そ			•	
Result		Query				•
No.	Score	Match	Length	DB	ID	Description
						Laby
1	2513 ·	99.8	477	2	Q79VE3 complete sig	Q79ve3 corynebacte
2	2457	97.6	477	2	Q9Z474	Q9z474 corynebacte
3	2378	94.5	477	2	Q8FNP0	Q8fnp0 corynebacte
4	2036.5	80.9	478	2	Q6NG84	· Q6ng84 corynebacte
5	1888.5	75.0	481	2 .	Q8FNM8	Q8fnm8 corynebacte
6	1838.5	73.0	478	2	Q939T2	. Q939t2 mycobacteri
7	1789.5	71.1	478	1	GLN1 MYCTU	Q10377 mycobacteri
8	1778.5	70.7	478	2	Q9CCD8	Q9ccd8 mycobacteri
9	1777.5	70.6	478	2	Q73YJ4	Q73yj4 mycobacteri
10	1689	67.1	466	2	085177	085177 amycolatops
11	1654.5	65.7	469	1	GLNA STRCO	P15106 streptomyce
12	1642.5	65.3	469	2	Q82AQ1	Q82aq1 streptomyce
13	1637.5	65.1	469	1	GLN1 STRRP	P77958 streptomyce
14	1618	64.3	478	2	Q8G5D8	Q8g5d8 bifidobacte
15	1598	63.5	474	2	Q6AFH0	Q6afhO leifsonia x

· ·								
10	5 1592.5	63.3	469	1	GLN1 STRVR		005542	streptomyce
1.		61.8	473	2	Q6A9Y9			propionibac
. 18			474	1	GLN1 FRAAL			frankia aln
19		56.5	472	2	Q7NLR9			gloeobacter
20		55.6	473	1	GLNA SYNY3			synechocyst
2:		55.5	470	2	Q74C40			geobacter s
22	2 1394	55.4	470	1	GLNA FREDI			fremyella d
2:	3 1380.5	54.8	473	1	GLNA SYNP2			synechococc
24	1376	54.7	471	2	Q8DIJ7			synechococc
25	1363.5	54.2	473	1	GLNA ANASP			anabaena sp
20	1357.5	53.9	476	2	Q89KR8			bradyrhizob
2	7 1345.5	53.5	473	2	050210			synechococc
28	3 1337	53.1	470	2	Q6MR33			bdellovibri
. 29	1326.5	52.7	474	2	Q9RHZ1			anabaena az
30	1321.5	52.5	473	2	Q7V1F3		Q7v1f3	prochloroco
3:	1313.5	52.2	491	2	Q8XRG8			ralstonia s
32		52.1	.473	2	Q7VBQ4			prochloroco
3:		52.1	473	2	Q7U7B2			synechococc
34		52.0	474	2	Q83HM2			tropheryma
3!		52.0	482	2	Q83GK6		Q83gk6	tropheryma
30		51.7	473	2	Q7V7X8			prochloroco
3		51.4	473	2	031044		031044	synechococc
38		50.6	469	2	Q87TE8		Q87te8	vibrio para
39			469	1	GLNA_AQUAE		066514	aquifex aeo
. 40		49.8	469	1	GLNA_VIBCH		Q9knj2	vibrio chol
4:		49.8	469	2	Q7MQ11	-		vibrio vuln
42		49.8	469	2	Q8DDR8			vibrio vuln
43		49.7	468	1	GLNA_VIBAL			vibrio algi
4		49.7		2	Q6LLR5			photobacter
. 4!	1242.5	49.4	469	2	Q8E976		Q8e976	shewanella